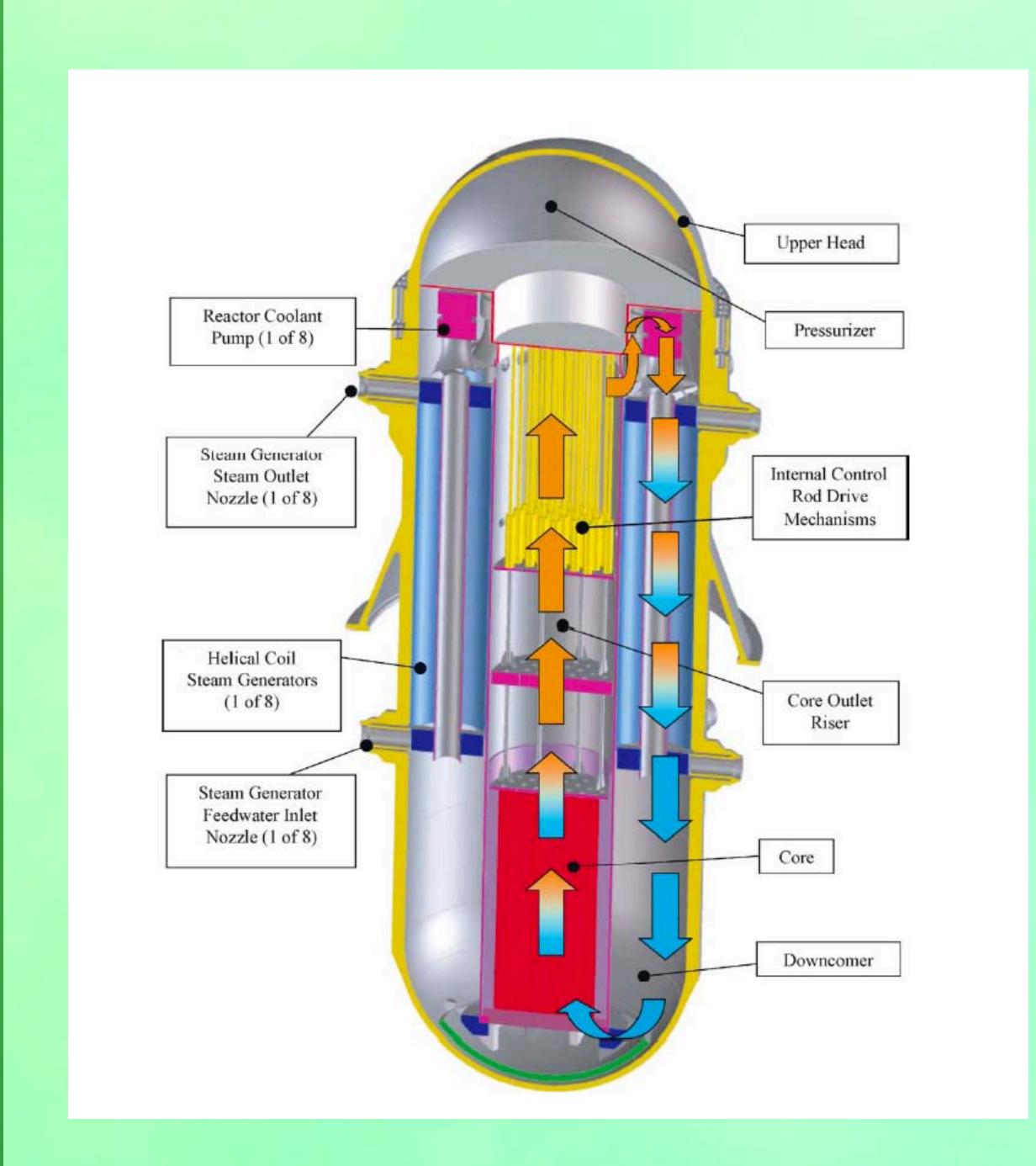


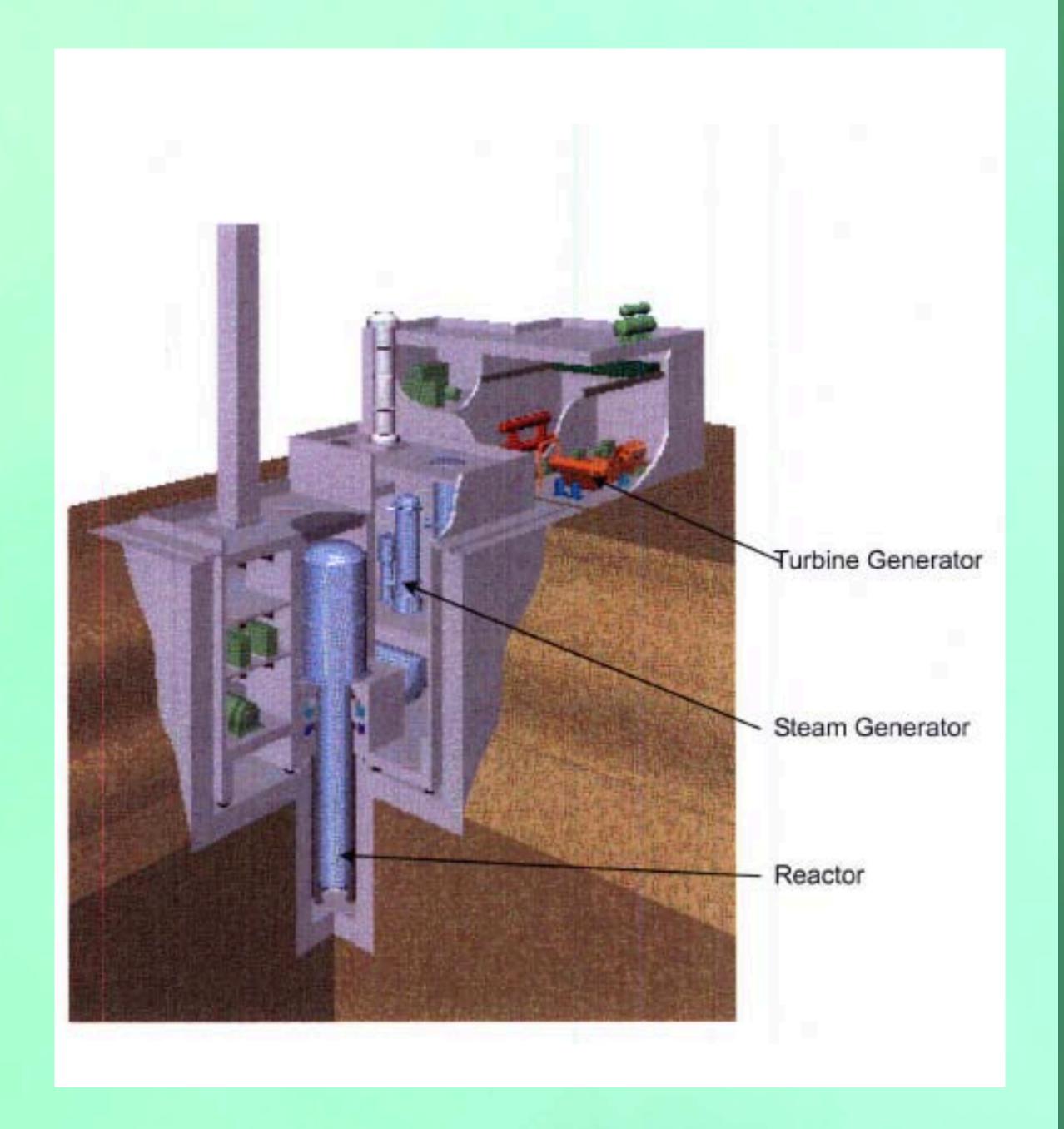
Office of New Reactors

Advanced Reactor Designs



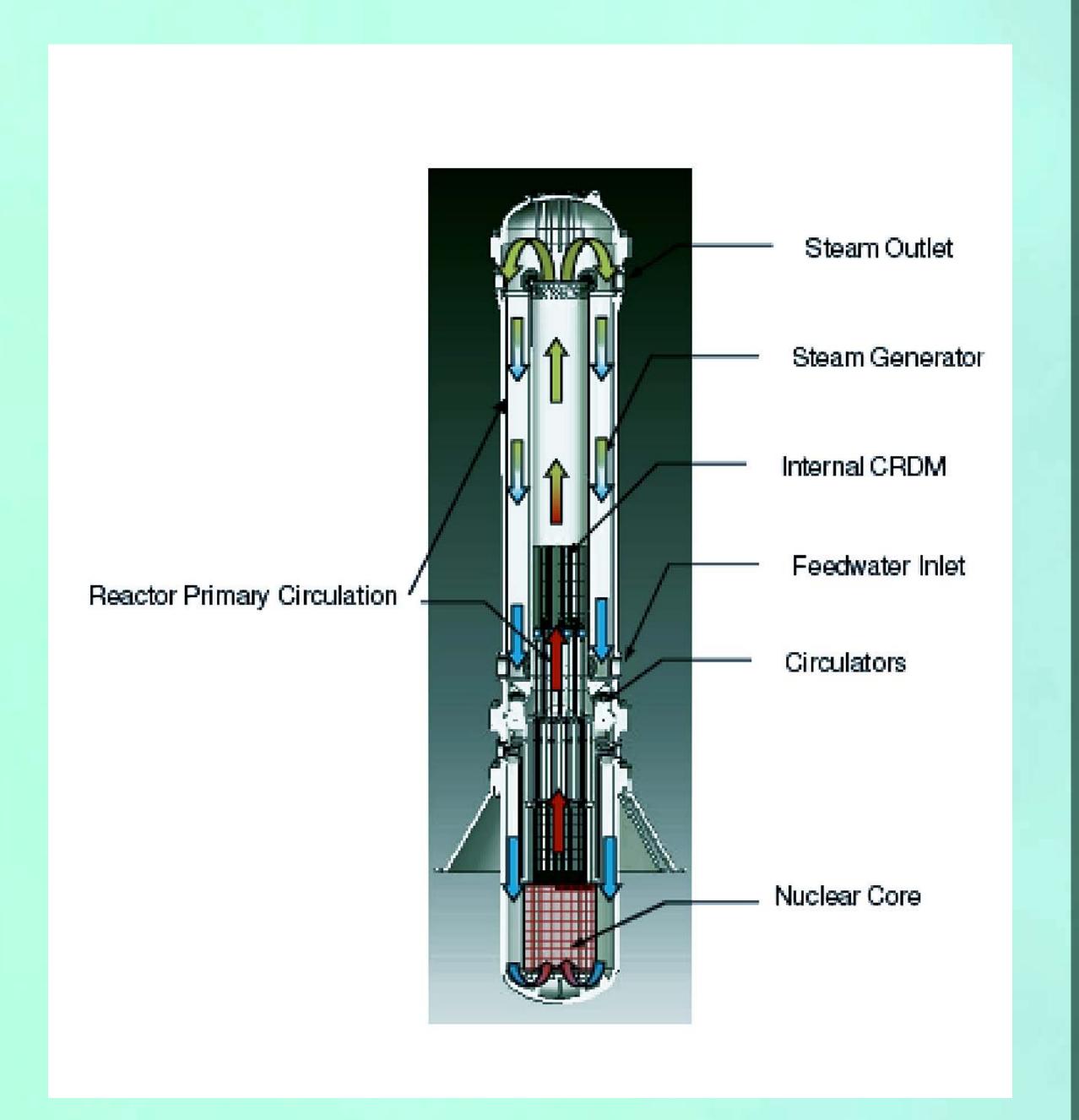
IRIS (International Reactor Innovative and Secure)

- Vendor: Westinghouse
- Reactor Power: 1000 MWt
- Electrical Output: 335 MWe
- Coolant: Light water
- Outlet Temperature: 327°C
- Fuel Design: 17 x 17 assemblies
 - 4.95 percent enrichment
 UO²
- Refueling: 3–3.5 years



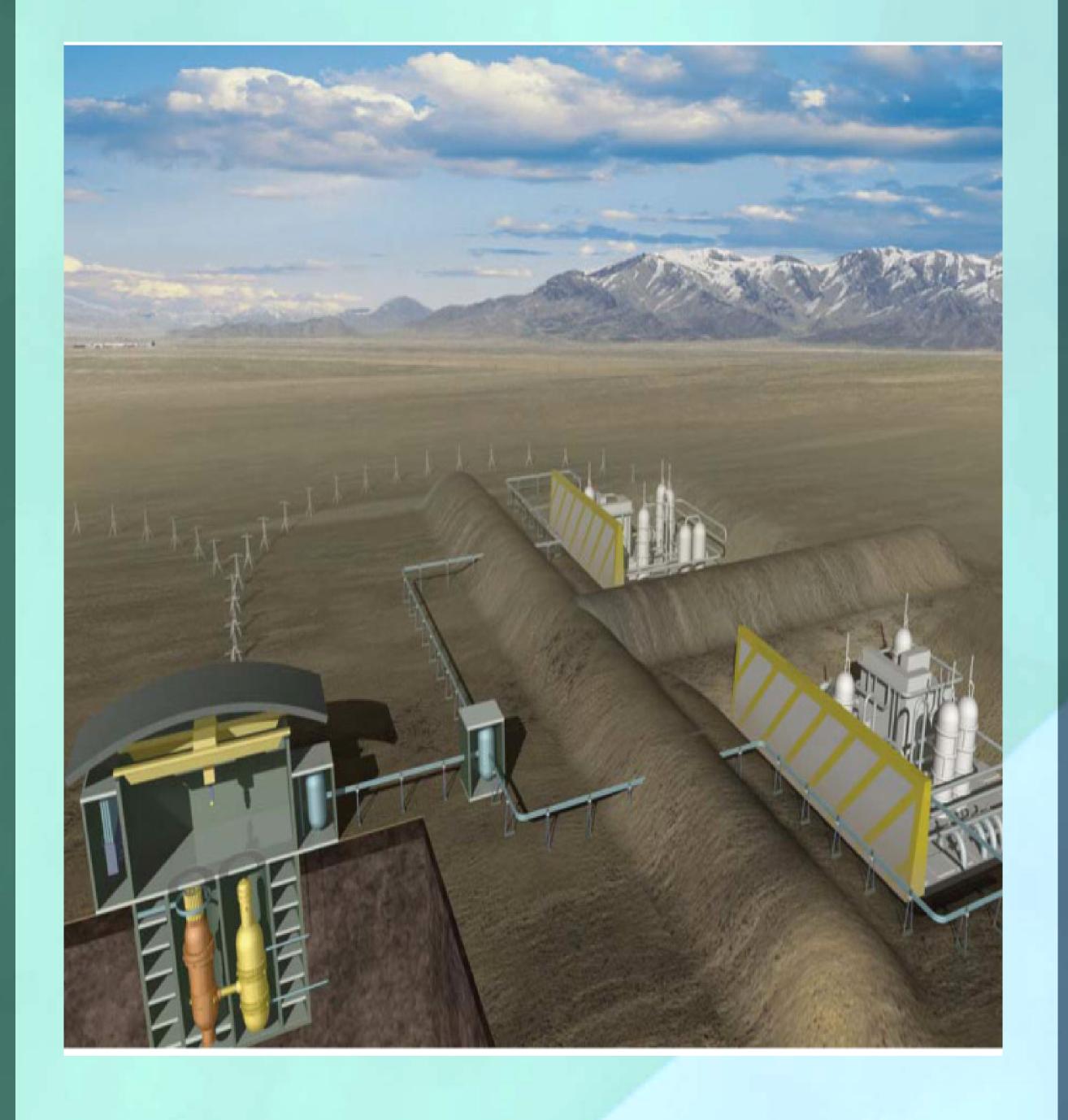
4S (Super-Safe, Small and Simple)

- Vendor: Toshiba
- Reactor Power: 30 MWt
- Electrical Output: 10 MWe
- Coolant: Liquid-metal (sodium)
- Outlet Temperature: 510°C
- Fuel Design: Hexagonal fuel assemblies
 - U-10 percent Zirconium
 Alloy
- Refueling: 30 years



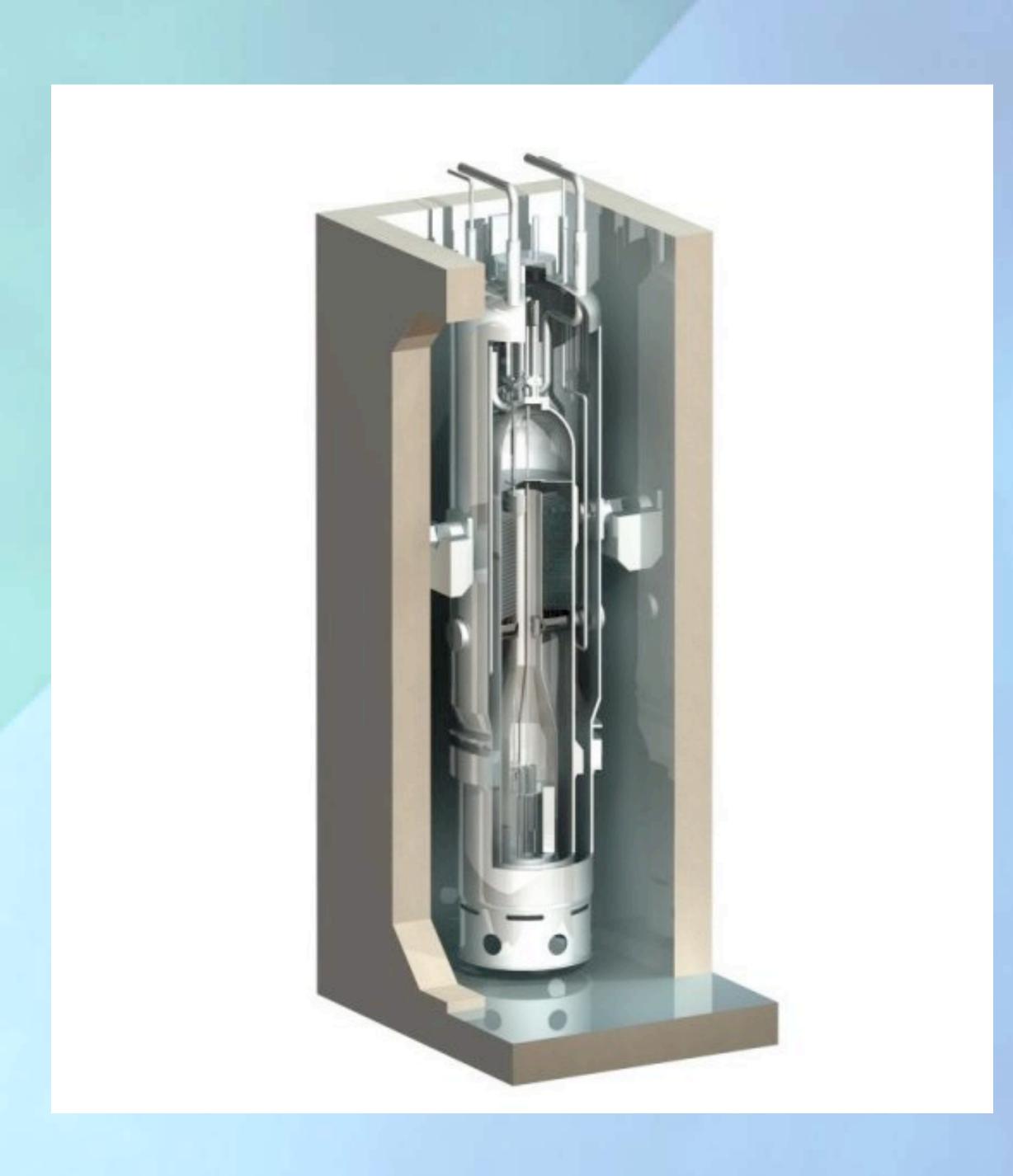
mPower

- Vendor: Babcock & Wilcox Company (B&W)
- Reactor Power: 400 MWt
- Electrical Output: 125 MWe
- Coolant: Light water
- Outlet Temperature: 327°C
- Fuel Design: Standard PWR fuel
- Refueling: 5 years



Next Generation Nuclear Plant (NGNP)

- Sponsor: Department of Energy (DOE)
- Vendor: DOE is currently selecting which reactor design will be used for the NGNP
- Reactor Power: ~ 250 MWt
- Electrical Output: To be determined
- Coolant: Gas-cooled
- Outlet Temperature: ~ 750 °C
- Fuel Design: Prismatic or Pebble Bed
- Refueling: To be determined



NuScale

- Vendor: NuScale Power Inc.
- Reactor Power: 160 MWt
- Electrical Output: 45 MWe
- Coolant: Light water
- Outlet Temperature: 575 °F
- Fuel Design: 6-foot long,
 17 x 17 assemblies
- Refueling: 24 months

Knowledge for Today and Tomorrow